

## #051 EXPLOSIVE SAFETY MANAGEMENT & ENGINEERING

This two-part course covers the requirements for NASA explosive safety programs and their management as defined in NSS 1740.12, "NASA Safety Standard for Explosives, Propellants, and Pyrotechnics". Also covered are basic engineering concepts requirements in TM5-1300/NAVFAC P-397/AFM 88-22, "Structures to Resist the Effects of Accidental Explosions", and DOD 6055.9-STD, "Ammunition and Explosives Safety". It provides basic information covering explosives safety engineering principles and requirements for NASA. The course includes hands on demonstrations of software currently available to calculate explosive overpressures, fragment velocities, quantity distance calculations, etc., and exercises to try out tools and techniques discussed. A calculator is required for this class. (Optional: Laptop computer). Note, this course replaces NSTC course 007, Explosive Safety Engineering, which will no longer be offered. The first three days of this class are essentially the same as NSTC 010, and personnel who have taken that class should contact the NSTC for guidance if they desire to take only the engineering portion of the class.

### **Course topics include:**

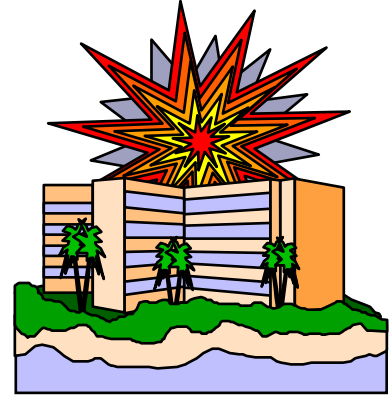
1. What are the effects of an explosion?
2. What are the effects of fragments?
3. How can personnel/facilities be protected from explosive effects?
4. How do I site my facilities to reduce the effects from an explosion?
5. How do I build my facilities to reduce the effects from an explosion?
6. What type of tools are available to perform the job?

### **Target Audience:**

- Safety, Reliability, Quality, and Maintainability Professionals.

### **About the Instructor:**

Mr. C. Art Wood, Jr. Mr. Wood has more than 30 years of safety and fire protection engineering experience. Much of his time has been associated with Test Safety Engineering work with testing of Standard and HARM Missile and the Shuttle Solid Rocket Boosters. He spent over 9 years in the explosive manufacturing business in the automotive air bag industry. He developed and installed the ultra high-speed fire detection and suppression systems used to protect processes equipment for the automotive air bag manufacture industry.



**Dates:**  
**June 5 - 9, 2006**  
**8:00-4:30**

**Location: MSFC**  
**Building 4200, Room G13D**

**2.4 CEUs available**